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July 23, 1990

Mr. John R. Nichter  
Occidental Chemical Corporation  
360 Rainbow Boulevard South  
Niagara Falls, New York 14302

MP

Dear Mr. Nichter:

Re: Final 6 NYCRR Part 373 Permit Modification  
Permit No. 90-86-0707  
Final 6 NYCRR Part 201/212 Permits  
EPA I.D. No. NYD000824482

This letter is to notify you of the issuance of the 6 NYCRR Part 373 permit modification and the 6 NYCRR Part 201/212 air emission permits all effective July 23, 1990. The draft permits were public noticed in the Department's Environmental Notice Bulletin (ENB) on February 14, 1990.

Enclosed are the modified pages to be inserted into the draft 6 NYCRR Part 373 public noticed on the date mentioned above. The following is a summary of the revisions to the draft permit:

1. Insert/replace the permit cover sheets (sheets 1,2, and 2B) with the final signed and dated pages;
2. Replace the draft Module VI with the enclosed Module VI.

The final permit consists of the entire 373 permit issued on July 31, 1989, as modified by the insertion of the modified draft permit modification. The final Part 201/212 air permits are also enclosed.

These final permits are issued in accordance with applicable provisions of the Environmental Conservation Law. The permits are valid for only that project, activity, or operation expressly authorized. If modifications are desired after permit issuance, you must submit the proposed revisions and receive written approval from the Permit Administrator prior to initiating any change. If the Department determines that the modification represents a material change in the scope of the authorized project, activity, operation, or permit conditions, you will be required to submit a new application for a permit.

**PLEASE REVIEW ALL PERMIT CONDITIONS CAREFULLY, INCLUDING MONITORING REQUIREMENTS AND COMPLIANCE SCHEDULES THAT ARE REQUIRED. IN PARTICULAR, IDENTIFY YOUR INITIAL RESPONSIBILITIES UNDER THIS PERMIT IN ORDER TO ASSURE TIMELY ACTION AND AVOID LATE REPORTING. SINCE FAILURE TO COMPLY PRECISELY WITH PERMIT CONDITIONS MAY BE TREATED AS A VIOLATION OF THE ENVIRONMENTAL CONSERVATION LAW, YOU ARE REQUESTED TO PROVIDE A COPY OF THE PERMIT TO THE PROJECT CONTRACTOR, FACILITY OPERATION, AND OTHER PERSONS DIRECTLY RESPONSIBLE FOR PERMIT IMPLEMENTATION (IF ANY).**

If you have any questions regarding this administrative processing of these permits, please contact this office at the above address. Technical questions relating to specific permit condition should be directed to Mr. Louis Violanti (716-847-4585) regarding the Part 373 permit or Mr. Robert Armbrust (716-847-4565) regarding the Part 201/212 permits.

Henry Sandomato

Sincerely,

Paul D. Doleski  
FOR

Steven J. Doleski  
Regional Permit Administrator

DEC PERMIT NUMBER

90-86-0707

FACILITY/PROGRAM NUMBER(s)

EPA ID No.

NYD000824482



## PERMIT

Under the Environmental Conservation Law

EFFECTIVE DATE

July 23, 1990

EXPIRATION DATE(s)

June 30, 1993

☐ Article 15, Title 3; 6NYCRR 327, 328, 329: Aquatic Pesticides

☐ Article 15, Title 5: Protection of Water

☐ Article 15, Title 15: Water Supply

☐ Article 15, Title 15: Water Transport

☐ Article 15, Title 15: Long Island Wells

☐ Article 15, Title 27: Wild, Scenic and Recreational Rivers

☐ 6NYCRR 608: Water Quality Certification

☐ Article 17, Titles 7, 8: SPDES

☐ Article 19: Air Pollution Control\*

☐ Article 23, Title 27: Mined Land Reclamation

☐ Article 24: Freshwater Wetlands

 N—New, R—Renewal, M—Modification,  
C—Construct (\*only), O—Operate (\*only)

☐ Article 25: Tidal Wetlands

☐ Article 27, Title 7; 6NYCRR 360: Solid Waste Management\*

☒ M Article 27, Title 9; 6NYCRR 373: Hazardous Waste Management

☐ Article 34: Coastal Erosion Management

☐ Article 36: Floodplain Management

☐ Articles 1, 3, 17, 19, 27, 37; 6NYCRR 380: Radiation Control

PERMIT ISSUED TO

Occidental Chemical Corporation

ADDRESS OF PERMITTEE

P.O. Box 344, Niagara Falls, New York 14302

AGENT FOR PERMITTEE/CONTACT PERSON

Mr. James Czapla, Superintendent of Environmental Control

TELEPHONE NUMBER

(716) 278-7534

NAME AND ADDRESS OF PROJECT/FACILITY (If different from Permittee)

Buffalo Avenue &amp; 47th Street, Niagara Falls, New York 14302

LOCATION OF PROJECT/FACILITY

4700 Buffalo Avenue

COUNTY

Niagara

TOWN/CITY/VILLAGE

Niagara Falls

UTM COORDINATES

DESCRIPTION OF AUTHORIZED ACTIVITY

Operation of a hazardous waste treatment, storage, and disposal facility at a chemical

production facility. Operation of 16 container storage areas (equivalent to 9680,

55 gallon drum + 3-4,000 gal. trailers + 68-30cu. yd. containers), 10 tanks

(78,500 gal. total) and a liquid injection incinerator.

## GENERAL CONDITIONS

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations and the conditions specified herein or attached hereto.

- The permittee shall file in the office of the appropriate regional permit administrator, or other office designated in the special conditions, a notice of intention to commence work at least 48 hours in advance of the time of commencement and shall also notify him/her promptly in writing of the completion of the work.
- The permitted work shall be subject to inspection by an authorized representative of the Department of Environmental Conservation which may order the work suspended if the public interest so requires pursuant to ECL §71-0301 and SAPA §401(3).
- The permittee has accepted expressly, by the execution of the application, the full legal responsibility for all damages, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and has agreed to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from the said project.
- The Department reserves the right to modify, suspend or revoke this permit at any time after due notice, and, if requested, hold a hearing when:
  - the scope of the project is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations are found; or
  - the permit was obtained by misrepresentation or failure to disclose relevant facts; or
  - newly discovered information or significant physical changes are discovered since the permit was issued.
- The permittee is responsible for keeping the permit active by submitting a renewal application, including any forms, fees or supplemental information which may be required by the Department, no later than 30 days (180 days for SPDES or Solid or Hazardous Waste Management permits) prior to the expiration date.
- This permit shall not be construed as conveying to the applicant any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any rights, title or interest in real or personal property held or vested in a person not a party to the permit.
- The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way which may be required for this project.
- Issuance of this permit by the Department does not, unless expressly provided for, modify, supersede or rescind an order on consent or determination by the Commissioner issued heretofore by the Department or any of the terms, conditions, or requirements contained in such order or determination.
- Any modification of this permit granted by the Department must be in writing and attached hereto.

PERMIT ISSUANCE DATE

July 23, 1990

PERMIT ADMINISTRATOR

Mr. Steven Doleski

ADDRESS

600 Delaware Ave., Buffalo, NY 14202

AUTHORIZED SIGNATURE

*Paul Deismann - Deputy Regional Permit Admin*

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Title 9: 6NYCRR Part 373 Hazardous Waste

ADDITIONAL GENERAL CONDITIONS FOR ARTICLE 27 ( Management Facility Permit )

- 10 All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application  
Such approved plans were prepared by Occidental Chemical Corporation on (See 11 below)

### SPECIAL CONDITIONS

11. This permit is based upon the assumption that the information submitted in the original permit application dated April 27, 1988 and the permit modification application dated June 17, 1988 and all succeeding revisions and data submissions are complete and accurate and that the facility will be operated as specified in the applications. Any inaccuracies or incompleteness found in the information may be grounds for the termination or modification of this permit and potential enforcement action.
12. The Permittee must operate the facility in strict accordance with the Modules and Attachments to this permit specified below:

		<u>Page</u>
a.	Module I: Standard Conditions	3-10
b.	Module II: General Facility Conditions	11-16
c.	Module III: Corrective Action & Waste Minimization	17-49
d.	Module IV: Storage/Treatment in Containers	50-51
e.	Module V: Storage/Treatment in Tanks	52-53C
f.	Module VI: Incineration	54-62E
g.	Module VII: Waste Pile Management	62A-62B
h.	Attachment A-1: Waste Analysis Plan	63-116
i.	Attachment A-2: Waste Characterization	117-315
j.	Attachment B: Procedures to Prevent Hazards	316-533
k.	Attachment C: Personnel Training	534-580
l.	Attachment D-1: Container Management	581-616
m.	Attachment D-2: Container/Waste Storage Locations	617-692
n.	Attachment E-1: Storage in Tanks	693-785
o.	Attachment E-2: Waste Pile Management	785A-785O
p.	Attachment F-1: Incinerator Design and Operation	786-867
q.	Attachment F-2: Wastes Authorized for Incineration	868-871
r.	Attachment G: Contingency Plan	872-996
s.	Attachment H: Closure Plan/Financial Requirements	997-1020
t.	Attachment I: Engineering Drawings	1021-1024
u.	Attachment J: Compliance Schedules	1025-1027
v.	Attachment K: References to Confidential Information	1028-1029
w.	Appendix I: Supplemental Data Collection Program	1030-1552
x.	Appendix II: CSF Health and Safety Plan	1553-1741

Note: This modified permit contains revised and additional pages. Therefore, all pages are not numerically sequential (e.g., p. 92A). See page 2A of this permit for a summary of the revised/added pages.

DEC PERMIT NUMBER

90-86-0707

PROGRAM/FACILITY NUMBER

NYD000824482

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## SPECIAL CONDITIONS

Title 9 - 6NYCRR Part 373 Hazardous Waste  
For Article 27 ( Management Facility Permit )

Summary of Revised/Additional Permit PagesModuleRevised/Additional Pages

V. Storage/Treatment in Tanks  
VI. Incineration

52, 53, 53A, 53B, 53C  
54-62, 62A-62E

AttachmentRevised/Additional Pages

A-1. Waste Analysis Plan  
A-2. Waste Characterization  
  
B. Procedures to Prevent Hazards  
C. Training  
D-1. Container Management  
D-2. Container/Waste Storage Locations  
E. Storage in Tanks  
F-1. Incinerator Design and Operation  
F-2. Wastes Authorized for Incineration  
G. Contingency Plan  
H. Closure Plan/Financial Requirements  
I. Engineering Drawings  
J. Compliance Schedules  
K. References to Confidential Information

66, 67, 91, 92, 92A-92H, 94, 100A  
139, 139A, 140, 146, 148, 152,  
153, 179-181 188A-188Z, 188AA-188AZ,  
188BA-188BI  
406, 406A-406D, 411  
553  
606  
635-637, 668  
696, 696A, 697, 755, 758A-758G, 780  
789, 790, 793, 795, 816, 818, 831  
869-871  
874, 883, 892, 922A  
999-1006, 1006A, 1006B  
1022, 1024  
1026, 1027, 1027A  
1029

DEC PERMIT NUMBER

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NYD000824482

PROGRAM NUMBER

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<input type="checkbox"/> COMMERCIAL C <input type="checkbox"/> UTILITY F <input type="checkbox"/> MUNICIPAL I <input type="checkbox"/> RESIDENTIAL <input checked="" type="checkbox"/> INDUSTRIAL D <input type="checkbox"/> FEDERAL G <input type="checkbox"/> EDUC INST J <input type="checkbox"/> OTHER		LICENSE NO. _____		25. START UP DATE 06 / 91		26. DRAWING NUMBERS OF PLANS SUBMITTED On file with 373 permit A59067 (2) B59061 A55119	
NAME & TITLE OF OWNERS REPRESENTATIVE James J. Czapl Environmental Engineer		8. TELEPHONE 716 278-7370		18. SIGNATURE OF OWNERS REPRESENTATIVE OR AGENT WHEN APPLYING FOR A PERMIT TO CONSTRUCT		27. PERMIT TO CONSTRUCT A <input checked="" type="checkbox"/> NEW SOURCE B <input type="checkbox"/> MODIFICATION	
28. CERTIFICATE TO OPERATE A <input type="checkbox"/> NEW SOURCE C <input type="checkbox"/> EXISTING B <input type="checkbox"/> MODIFICATION		30. GROUND ELEVATION (FT) 571		31. HEIGHT ABOVE STRUCTURES (FT) -20		32. STACK HEIGHT (FT) 8	
33. INSIDE DIMENSIONS (IN) 2		34. EXIT TEMP (°F) 60		35. EXIT VELOCITY (FT/SEC) 8.48		36. EXIT FLOW RATE (ACFM) 11.1	
37. SOURCE CODE 1511		38. HRS/DAY 24		39. DAYS/YR 365		40. % OPERATION BY SEASON Winter 25 Spring 25 Summer 25 Fall 25	

1. Twenty thousand gallon storage tank used to store hazardous waste for the residue incinerator. Tank is padded with nitrogen and vented thru a carbon vent sorb unit.

EMISSION CONTROL EQUIPMENT I.D. VS-1		CONTROL TYPE 17		MANUFACTURER'S NAME AND MODEL NUMBER Carbon Vent Sorb (Calgon or ASI)		DISPOSAL METHOD 9		DATE INSTALLED MONTH / YEAR 06 / 91		USEFUL LIFE 1	
---	--	--------------------	--	--	--	----------------------	--	--	--	------------------	--

**CALCULATIONS**

**Working Loss Potential**

NOTE: This tank will be used to store remedial waste and blend plant waste. A list of these materials is contained in the 373 permit info on Hyde Park NAPL and Taft waste is attached. A generic Halogenated organic contaminant is therefore listed along with PCB and TCDD which are trace quantities. Therefore assume M = 200 P = 0.4

Rate 300,000 gal

$LW = 2.4 \times 10^{-2} \text{ MP Kn Kc}$   
 $= 2.4 \times 10^{-2} (200)(0.4 \times 14.7)(1.0)(1.0)$   
 $= 0.032 \text{ lb/1000 gal}$

$ERP = 0.032 \text{ lb/1000 gal} \times 300$   
 $= 9.6 \text{ lb/yr} = 1 \times 10^{-3} \text{ lb/hr}$   
 $\text{Emission Rate} = 1 \times 10^{-5} \text{ lb/hr}$

$AG-1 \text{ Remedy}$   
 $42.15 \times 10^{-5} = Ca = 4.7 \times 10^{-4}$   
 $82.16$

CONTAMINANT		INPUT OR PRODUCTION UNIT	UNIT	EMISSIONS	% CONTROL EFFICACY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
NAME	CAS NUMBER			ACTUAL		ERP	ACTUAL	ACTUAL	PERMISSIBLE
Halogenated Organics	See List	56	57	0.01	99	1x10 <sup>-3</sup>	1x10 <sup>-5</sup>	9.6	9.6
PCDD/PCDF Total	0 1 7 4 6 - 0 1 - 6	70	71	Trace	99	Trace	Trace	Trace	Trace
Polychlorinated Biphenyls	0 1 3 3 6 - 3 6 - 3	85	86	Trace	99	Trace	Trace	Trace	Trace

SOLID FUEL TONS/YR 145		LIQUID FUEL THOUSANDS OF GALLONS / YR 147		GAS THOUSANDS OF CF/YR 151		APPLICABLE RULE 212	
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155. SIGNATURE OF AUTHORIZED REPRESENTATIVE OR AGENT  
 [Signature]  
 DATE 7/8/90

156. DATE APPL. RECEIVED  
 7/12/90

157. DATE APPL. REVIEWED  
 7/12/90

158. REVIEWED BY  
 A. Siller, P.E.

PERMIT TO CONSTRUCT DATE ISSUED 7/23/90 EXPIRATION DATE 06/30/93 SIGNATURE OF APPROVAL [Signature] FEE		173. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT 2. THIS IS NOT A CERTIFICATE TO OPERATE 3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE	
--	--	---	--

CERTIFICATE TO OPERATE DATE ISSUED EXPIRATION DATE SIGNATURE OF APPROVAL FEE		173. INSPECTED BY 174. INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES INDICATED ON FORM 175. ISSUE CERTIFICATE TO OPERATE FOR SOURCE AS BUILT 176. APPLICATION FOR C.O. DENIED	
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4. SPECIAL CONDITIONS:

CARBON CANISTERS WILL BE REPLACED IN PART 373 PERMIT

2. ACCORDING TO PROCEDURE CONTAINED



7 NAME & TITLE OF OWNERS REPRESENTATIVE Joseph A Jurzkwicz Environmental Engineer	8 TELEPHONE 716-278-7477	18 SIGNATURE OF OWNERS REPRESENTATIVE OR AGENT WHEN APPLYING FOR A PERMIT TO CONSTRUCT	27 PERMIT TO CONSTRUCT A NEW SOURCE B MODIFICATION	28 CERTIFICATE TO OPERATE A NEW SOURCE C EXISTING SOURCE B MODIFICATION
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29 EMISSION POINT ID.	30 GROUND ELEVATION (FT)	31 HEIGHT ABOVE STRUCTURES (FT)	32 STACK HEIGHT (FT)	33 INSIDE DIMENSIONS (IN)	34 EXIT TEMP (°F)	35 EXIT VELOCITY (FT/SEC)	36 EXIT FLOW RATE (ACFM)	37 SOURCE CODE	38 HRS/DAY	39 DAYS/YR	40 % OPERATION BY SEASON Winter Spring Summer Fall
U7602	571	-20	8	2	60	8.48	11.1		24	365	2.5 2.5 1.5 1.5

41 DESCRIBE PROCESS OR UNIT

1 Tank farm consisting of six storage tanks. Each storage tank has its own separate emission control equipment. Due to low emission rates and close proximity of vents, these tanks are considered an emission source.

EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURE'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED MONTH / YEAR	USEFUL LIFE
42	43	44	45	46	47
48	49	50	51	52	53

CALCULATIONS

See separate 76-19-4 forms

CONTAMINANT		INPUT OR PRODUCTION UNIT	ENV. RATING	EMISSIONS				% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HRI)		ANNUAL EMISSIONS (LBS/YR)	
NAME	CAS NUMBER			ACTUAL	UNIT	HOW MEAS	PERMISSIBLE		ERP	ACTUAL	ACTUAL	PERMISSIBLE
Benzoyl Chloride	00098-88-4	56	58	7.8	36	7.8	99	99	7.8x10 <sup>-4</sup>	7.8x10 <sup>-6</sup>	6.8	2.6
Benzotrichloride	00098-07-7	71	72	A	74	74	99	99				
Orthochlorotoluene	00095-49-8	86	87	A	89	29.65	36	99	29.65x10 <sup>-4</sup>	29.65x10 <sup>-6</sup>	2.6	2.6
Hexachlorocyclopentadiene	00077-47-4	101	102	A	103	94	6	99				
2,4 Dichlorotoluene	00095-73-8	116	117	A	119	23	36	99	23x10 <sup>-4</sup>	23x10 <sup>-6</sup>	2.04	2.04
3,4 Dichlorobenzotrifluoride	00328-84-7	131	132	A	133	17	36	99	17x10 <sup>-4</sup>	17x10 <sup>-6</sup>	1.49	1.49

TYPE SOLID FUEL TONS/YR	% S	TYPE OIL THOUSANDS OF GALLONS/YR	% S	TYPE GAS THOUSANDS OF CF/YR	BTU/CF	APPLICABLE RULE	APPLICABLE RULE			
144	145	146	147	148	149	150	151	152	153	154
									212	

On completion of construction sign the statement listed below and forward to the appropriate field representative

E PROCESS, EXHAUST OR VENTILATION SYSTEM HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

155 SIGNATURE OF AUTHORIZED REPRESENTATIVE OR AGENT

156 DATE APPL. RECEIVED

157 DATE APPL. REVIEWED

158 REVIEWED BY

156 LOCATION CODE

157 FACILITY ID NO.

158 U.T.M. (E)

159 U.T.M. (N)

160 SIC NUMBER

291100011181711777928110

PERMIT TO CONSTRUCT

164 DATE ISSUED

165 EXPIRATION DATE

166 SIGNATURE OF APPROVAL

167 FEE

168 1. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT  
2. THIS IS NOT A CERTIFICATE TO OPERATE  
3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE

RECOMMENDED ACTION RE: C.O.

169 DATE ISSUED

170 EXPIRATION DATE

171 SIGNATURE OF APPROVAL

172 FEE

07/23/90 06/30/93 Paul R. Gorman

173 1. INSPECTED BY DATE  
2. INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES INDICATED ON FORM  
3. ISSUE CERTIFICATE TO OPERATE FOR SOURCE AS BUILT  
4. APPLICATION FOR C.O. DENIED DATE INITIALED

174 SPECIAL CONDITIONS

CARBON CANISTERS WILL BE REPLACED ACCORDING TO PROCEDURE CONTAINED IN PART 373 PERMIT.

7. NAME OF OWNERS REPRESENTATIVE		8. TELEPHONE	18. SIGNATURE OF OWNERS REPRESENTATIVE OR AGENT WHEN APPLYING FOR A PERMIT TO CONSTRUCT		27. PERMIT TO CONSTRUCT A <input type="checkbox"/> NEW SOURCE B <input type="checkbox"/> MODIFICATION		28. CERTIFICATE TO OPERATE A <input type="checkbox"/> NEW SOURCE C <input type="checkbox"/> EXISTING SOURCE B <input checked="" type="checkbox"/> MODIFICATION	
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30. GROUND ELEVATION (FT)	31. HEIGHT ABOVE STRUCTURES (FT)	32. STACK HEIGHT (FT)	33. INSIDE DIMENSIONS (IN)	34. EXIT TEMP (°F)	35. EXIT VELOCITY (FT/SEC)	36. EXIT FLOW RATE (ACFM)	37. SOURCE CODE	38. HRS / DAY	39. DAYS / YR	40. % OPERATION BY SEASON Winter Spring Summer F all			
47602	571	-20	8	2	60	8.48	11.1	24	365	25	25	25	25

DESCRIBE PROCESS OR UNIT			
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EMISSION CONTROL EQUIPMENT ID	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED MONTH / YEAR	USEFUL LIFE
10	43	99	44	45	46
11	19	50	51	52	53

4. AIR QUALITY	
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CONTAMINANT		INPUT OR PRODUCTION	UNIT	ENV. RATING	EMISSIONS			% CONTROL EFFICACY	HOURLY EMISSIONS (LBS/H)		ANNUAL EMISSIONS (LBS/YR)		
NAME	CAS NUMBER				ACTUAL	UNIT	HOW DET	PERMISSIBLE	ERP	ACTUAL	ACTUAL	PERMISSIBLE	
PCB	01336-36-3	56	57	58	59	60	61	62	63	64	65	66	
PCDD/PCDF TOTAL	01746-01-6	70	71	72	73	74	75	76	77	78	79	80	
		85	86	87	88	89	90	91	92	93	94	95	
		100	101	102	103	104	105	106	107	108	109	110	
		115	116	117	118	119	120	121	122	123	124	125	
		130	131	132	133	134	135	136	137	138	139	140	

LIQUID FUEL THOUSANDS OF GALLONS/YR		% S	GAS THOUSANDS OF CF/YR		DTU/CF	APPLICABLE RULE	APPROPRIATE UNIT
147	148	149	150	151	152	153	154
						212	

154. STATEMENT OF THE STATEMENT LISTED BELOW AND FORWARD TO THE APPROPRIATE FIELD REPRESENTATIVE

155. SIGNATURE OF AUTHORIZED REPRESENTATIVE OR AGENT

156. UTM (E)	157. UTM (N)	158. SIC NUMBER	159. DATE APPL. RECEIVED	160. DATE APPL. REVIEWED	161. REVIEWED BY
2911000118	17117779	2810	-/-/-	-/-/-	-/-/-

PERMIT TO CONSTRUCT		167. FEE
168. 1. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT 2. THIS IS NOT A CERTIFICATE TO OPERATE 3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE		

CERTIFICATE TO OPERATE		172. FEE
173. 1. <input type="checkbox"/> INSPECTED BY _____ DATE _____ 2. <input type="checkbox"/> INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT CHANGES IDENTIFIED 3. <input type="checkbox"/> ISSUE CERTIFICATE TO OPERATE FOR SOURCE AS BUILT 4. <input type="checkbox"/> APPLICATION FOR C.O. DENIED _____ DATE _____ INITIALS _____		

2. _____	
4. _____	
6. _____	
8. _____	



## PROCESS, EXHAUST OR VENTILATION SYSTEM

UNIT OR PROCESS DATA

COPIES

WHITE - ORIGINAL  
 GREEN - DIVISION OF AIR  
 WHITE - REGIONAL OFFICE  
 WHITE - FIELD REP.  
 YELLOW - APPLICANT

PLEASE PRINT OR TYPE

S E C. H	175. EMISSION POINT I.D.	176. UNIT I.D.
	U7602	01

177. SOURCE CODE	178. HRS./DAY	179. DAYS/YR	180. % OPERATION BY SEASON			
1511	24	365	Winter	Spring	Summer	Fall
			215	21	21	21

S E C. I	181. DESCRIBE PROCESS OR UNIT	1. Storage tank for Benzoyl Chloride residues. Capacity = 5,000 gallons. Tank is padded with nitrogen and vent is pressure controlled to eliminate breathing losses.	2. 5,000 gallons. Tank is padded with nitrogen
		3. and vent is pressure controlled to eliminate breathing losses.	4. losses.
		5.	6.
		7.	8.

S E C. J	EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182. VS-1	183. 17	184. Calgon Vent Sorb Air Purification Unit	185. 2	186. 09/82	187. 1
	188.	189.	190.	191.	192. /	193.

## CALCULATIONS

Working Loss Potential

lw = Working loss - lbs/1000 gal

M = Molecular Wt.

P = Vapor Pressure - psia

K<sub>N</sub> = Turnover FactorK<sub>c</sub> = Crude Oil Factor

$$lw = 2.4 \times 10^{-2} MPK_N K_c$$

$$= 2.4 \times 10^{-2} (40.57) \left( \frac{0.4 \times 14.7}{760} \right) (0.6)(1.0)$$

$$\approx 0.02 \text{ lb/1000 gal}$$

$$1984 \text{ Rate} \sim 340,000 \text{ gal}$$

$$\begin{aligned} ERP &= 0.02 \text{ lb/1000 gal} \times 340 \frac{\text{gal}}{\text{yr}} \\ &= 6.80 \text{ lb/yr} \times \frac{1}{24 \times 365} \\ &= 7.8 \times 10^{-4} \text{ lb/hr.} \end{aligned}$$

$$\begin{aligned} \text{Emission Rate} &= 7.8 \times 10^{-4} \text{ lb/hr} \times (1-519) \\ &= 7.8 \times 10^{-6} \text{ lb/hr} \end{aligned}$$

S E C. I O N L	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 <sup>x</sup>
194.	Benzoyl Chloride	00098-88-4	196.	197.	198. 7.8	199. 3	200. 6	201. 99	202. 7.8x10 <sup>-4</sup>	203. 7.8x10 <sup>-6</sup>	204. 6.2	205. -2
206.	Benzotrachloride	00098-07-7	208.	209.	210. 94	211. 6	212. 99	213. 99	214.	215.	216.	217.
218.			220.	221.	222.	223.	224.	225.	226.	227.	228.	229.
230.			232.	233.	234.	235.	236.	237.	238.	239.	240.	241.
242.			244.	245.	246.	247.	248.	249.	250.	251.	252.	253.
254.			256.	257.	258.	259.	260.	261.	262.	263.	264.	265.

A 2 9 1 1 1 0 0 0 1 1 1 8 0 7 6 0 2 1 0 2

NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

PROCESS, EXHAUST OR VENTILATION SYSTEM  
UNIT OR PROCESS DATA

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PLEASE PRINT OR TYPE

S E C. H	175. EMISSION POINT I.D.	176. UNIT I.D.
	U 7 6 0 2	0 2

177. SOURCE CODE	178. HRS./DAY	179. DAYS/YR	180. % OPERATION BY SEASON			
1511	24	365	Winter	Spring	Summer	Fall
			2.5	2.5	2.5	2.5

S E C. I	181. DESCRIBE PROCESS OR UNIT	1. Miscellaneous Residue Storage Tank. Capacity = 5,000 gallons. Tank is padded with nitrogen and vent
		3. is pressure controlled to eliminate breathing losses. STORAGE TANK FOR OCT of LG 72
		5.
		6.
		7.

S E C. J	EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182. 18=2	183. 17	184. Calgon Vent Sorb Air Purification Unit	185. 2	186. 09/82	187. 1
	188.	189.	190.	191.	192. /	193.

S E C T I O N K	CALCULATIONS	Working Loss Potential	ERP = $0.141 \text{ lb}/1000 \text{ gal} \times 20 = 2.82 \text{ lb}/\text{hr} \times \frac{1}{24 \times 365} = 3.2 \times 10^{-4} \text{ lb}/\text{hr}$
		$LW = 2.4 \times 10^{-2} \text{ MPK}_N K_c$	Emission Rate -
		$= 2.4 \times 10^{-2} (126.59) \left( \frac{2.4 \times 14.7}{760} \right) (1.0) (1.0)$	$= 3.2 \times 10^{-4} \text{ lb}/\text{hr} \times (1-99)$
		$= 0.141 \text{ lb}/1000 \text{ gal}$	$= 3.2 \times 10^{-6} \text{ lb}/\text{hr}$

1984 Rate ~ 20,000 gal

S E C T I O N L	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 x
	194. Orthochlorotoluene	195. 00095-49-8	196.	197.	198. 3.2	199. 3	200. 6	201. 99	202. $3.2 \times 10^{-4}$	203. $3.2 \times 10^{-6}$	204. 2.82	205. -2
	206.	207.	208.	209.	210.	211.	212.	213.	214.	215.	216.	217.
	218.	219.	220.	221.	222.	223.	224.	225.	226.	227.	228.	229.
	230.	231.	232.	233.	234.	235.	236.	237.	238.	239.	240.	241.
	242.	243.	244.	245.	246.	247.	248.	249.	250.	251.	252.	253.
	254.	255.	256.	257.	258.	259.	260.	261.	262.	263.	264.	265.

PROCESS, EXHAUST OR VENTILATION SYSTEM

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PLEASE PRINT OR TYPE

S E C. H	175. EMISSION POINT I.D.	176. UNIT I.D.
	U 7 6 0 2	0 3

177. SOURCE CODE	178. HRS./DAY	179. DAYS/YR	180. % OPERATION BY SEASON			
1511	24	365	Winter	Spring	Summer	Fall

S E C. I	181. DESCRIBE PROCESS OR UNIT	1. Agitated Residue Storage. Capacity = 5,000/gallons.	2. Tank is padded with nitrogen and vent is
		3. pressure controlled to eliminate breathing losses.	4. DECH PLUS RESIDUE STORAGE
		5.	6.
		7.	8.

S E C. J	EMISION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182. VS-3	183. 17	184. Calgon Vent Sorb Air Purification Unit	185. 2	186. 09/82	187. 1
	188.	189.	190.	191.	192. /	193.

S E C. T I O N K	CALCULATIONS	
	<p><u>Working loss Potential</u></p> $L_w = 2.4 \times 10^{-2} MPK_N K_c$ $= 2.4 \times 10^{-2} (126.59) \left( \frac{2.4 \times 14.7}{760} \right) (1.0) (1.0)$ $= 0.141 \text{ lb/1000 gal}$ <p>1984 Rate ~ 50,000 gal</p>	<p><u>Emission Rate</u></p> $ERP = 0.141 \text{ lb/1000 gal} \times 50 = 7.05 \text{ lb/yr} \times \frac{1}{24 \times 365} = 8.05 \times 10^{-4} \text{ lb/hr}$ $= 8.05 \times 10^{-4} \text{ lb/hr} \times (1 - .99)$ $= 8.05 \times 10^{-6} \text{ lb/hr}$

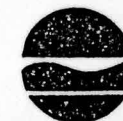
S E C. T I O N L	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10x
	194. Orthochlorotoluene	195. 00095-49-8	196.	197.	198. 8.05	199. 3	200. 6	201. 99	202. 8.05x10 <sup>-4</sup>	203. 8.05x10 <sup>-6</sup>	204. 7.05	205. -2.
	206. Hexachlorocyclopentadiene	207. 00077-47-4	208.	209.	210.	211. 94	212. 6	213. 99	214.	215.	216.	217.
	218.	219.	220.	221.	222.	223.	224.	225.	226.	227.	228.	229.
	230.	231.	232.	233.	234.	235.	236.	237.	238.	239.	240.	241.
	242.	243.	244.	245.	246.	247.	248.	249.	250.	251.	252.	253.
	254.	255.	256.	257.	258.	259.	260.	261.	262.	263.	264.	265.



A 2 7 1 1 0 0 0 1 1 8 U 7 6 0 2 I 0 4

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S E C. H	175. EMISSION POINT I.D.	176. UNIT I.D.
	U 7 6 0 2	0 4

177. SOURCE CODE	178. HRS./DAY	179. DAYS/YR	180. % OPERATION BY SEASON			
1511	24	365	Winter	Spring	Summer	Fall
			2.5	2.5	2.5	2.5

S M C. I	181. DESCRIBE PROCESS OR UNIT	1. Storage tank for monochlorotoluene process residues.	2. Capacity = 10,000 gallons. Tank is padded with
		3. nitrogen and vent is pressure controlled to eliminate breathing losses.	4. TANK IS HEATED (26-40C)
		5. TANK T-4 (UNIT 04) CAN BE USED FOR STORAGE	6. OF REMEDIAL WASTE.
		7.	8.

S M C. J	EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182. VS-4	183. 17	184. Calgon Vent Sorb. Air Purification Unit	185. 2	186. 09 / 82	187. 1
	188.	189.	190.	191.	192. /	193.

S E C T I O N K	CALCULATIONS	1984 Rate: ~ 55,000 2,4 DCT
	Working loss Potential	~ 35,000 OCT
	OCT From Previous Tank	ERP = 0.141 lb/1000 gal x 35 = 4.93 lb/yr x $\frac{1}{24 \times 365} = 5.6 \times 10^{-4}$ lb/hr OCT
	Lw = 0.141 lb/1000 gal	= 0.37 lb/1000 gal x 55 = 20.35 lb/yr x $\frac{1}{24 \times 365} = 23 \times 10^{-4}$ lb/hr 2,4 DCT
	2,4 DCT	Emission Rate
	Lw = $2.4 \times 10^{-2}$ MPK <sub>N</sub> K <sub>c</sub>	= $5.6 \times 10^{-4} \times (1-99) = 5.6 \times 10^{-6}$ lb/hr OCT
	= $2.4 \times 10^{-2} (161.0) (\frac{5 \times 147}{760}) (1.0) (1.0)$	= $23 \times 10^{-4} \times (1-99) = 23 \times 10^{-6}$ lb/hr 2,4 DCT
	= 0.37 lb/1000 gal	

S E C T I O N L	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 <sup>x</sup>
194.	Othochlorotoluene	0.0.95-49-8	196.	197.	198. 5.6	199. 3	200. 6	201. 99	202. $5.6 \times 10^{-4}$	203. $5.6 \times 10^{-6}$	204. 4.93	205. -2
206.	2,4 Dichlorotoluene	0.0.95-73-8	208.	209.	210. 23.0	211. 3	212. 6	213. 99	214. $23 \times 10^{-4}$	215. $23 \times 10^{-6}$	216. 2.04	217. -1
218.	PCB	01336-36-3	220.	221.	222.	223. 94	224. 6	225. 99	226.	227.	228.	229.
230.	PCDD/PCDF TOTAL	01746-01-6	232.	233.	234.	235. 94	236. 6	237. 99	238.	239.	240.	241.
242.			244.	245.	246.	247.	248.	249.	250.	251.	252.	253.
254.			256.	257.	258.	259.	260.	261.	262.	263.	264.	265.

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S E C. H	175. EMISSION POINT I.D.	176. UNIT I.D.
	47602	05

177. SOURCE CODE	178. HRS./DAY	179. DAYS/YR	180. % OPERATION BY SEASON			
1511	24	365	Winter	Spring	Summer	Fall
			25		2	2

S E C. I	181. DESCRIBE PROCESS OR UNIT	1. Storage tank for orthochlorotoluene. Capacity = 10,000 gallons. Tank is padded with nitrogen gas.	2. 30
		3. is pressure controlled to eliminate breathing losses.	4. 4
		5. TANK T-5 (UNIT 05) CAN BE USED FOR	6. STORAGE OF REMEDIAL WASTE.
		7.	8.

S E C. J	EMISION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182. VS-5	183. 17	184. Calgon Vent Sorb Air Purification Unit	185. 2	186. 09 / 82	187. 1
	188.	189.	190.	191.	192. /	193.

## CALCULATIONS

Working Loss Potential

$$LW = 2.4 \times 10^2 \text{ MPK/Kc}$$

$$= 2.4 \times 10^{-2} (126.59) \left( \frac{2.4 \times 14.7}{760} \right) (1.0) (1.0)$$

$$= 0.141 \text{ lb/1000 gal}$$

1984 Rate ~ 80,000 gal

$$ERP = 0.141 \text{ lb/1000 gal} \times 80 = 11.28 \times \frac{1}{24 \times 365} = 12.8 \times 10^{-4} \text{ lb/hr}$$

Emission Rate

$$= 12.8 \times 10^{-4} \text{ lb/hr} \times (1 - .99)$$

$$= 12.8 \times 10^{-6} \text{ lb/hr}$$

S E C. T I O N K	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 x
194.	Orthochlorotoluene	195. 00095-49-8	196.	197.	198. 12.8	199. 3	200. 6	201. 99	202. 12.8 x 10 <sup>-4</sup>	203. 12.8 x 10 <sup>-6</sup>	204. 1.13	205. -1
206.	PCB	207. 01336-36-3	208.	209.	210.	211. 94	212. 6	213. 99	214.	215.	216.	217.
218.	PCDD/PCDF TOTAL	219. 01746-01-6	220.	221.	222.	223. 94	224. 6	225. 99	226.	227.	228.	229.
230.		231.	232.	233.	234.	235.	236.	237.	238.	239.	240.	241.
242.		243.	244.	245.	246.	247.	248.	249.	250.	251.	252.	253.
254.		255.	256.	257.	258.	259.	260.	261.	262.	263.	264.	265.

PROCESS, EXHAUST OR VENTILATION SYSTEM  
UNIT OR PROCESS DATA



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PLEASE PRINT OR TYPE

S E C. H	175. EMISSION POINT I.D.	176. UNIT I.D.
	U 7 6 0 2 0 6	

177. SOURCE CODE	178. HRS./DAY	179. DAYS/YR	180. % OPERATION BY SEASON			
1511	24	365	Winter	Spring	Summer	Fall

S E C. I	181. DESCRIBE PROCESS OR UNIT	1. Storage tank for parachlorobenzotrifluoride residue.	2. Capacity = 10,000 gallons. Tank is padded with
		3. nitrogen and vent is pressure controlled to eliminate breathing losses.	
		5. TANK T-6 (UNIT 06) CAN BE USED FOR	6. STORAGE OF REMEDIAL WASTE.
		7.	8.

S E C. J	EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182. VS46	183. 17	184. Calgon Vent Sorb Air Purification Unit	185. 2	186. 07 / 82	187. 1
	188.	189.	190.	191.	192. /	193.

S E C. T I O N K	CALCULATIONS	$ERP = 0.13 \text{ lb}/1000 \text{ gal} \times 115 = 14.95 \text{ lb}/\text{yr} \times \frac{1}{24 \times 365} = 17 \times 10^{-4} \text{ lb}/\text{hr}$
	<p><u>Working loss Potential</u></p> $LW = 2.4 \times 10^{-2} \text{ MPKN Kc}$ $= 2.4 \times 10^{-2} (215.0) \left( \frac{1.3 \times 14.7}{760} \right) (1.0) (1.0)$ $= 0.13 \text{ lb}/1000 \text{ gal}$ <p>1984 Rate ~ 115,000 gal</p>	<p><u>Emission Rate</u></p> $= 17 \times 10^{-4} \text{ lb}/\text{hr} \times (1 - 99)$ $= 17 \times 10^{-6} \text{ lb}/\text{hr}$

CONTAMINANT													
S E C T I O N  L	NAME	CAS NUMBER	INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)		
					ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 x	
194.	34 Dichlorobenzotrifluoride	195. 00328-84-7	196.	197.	198. 17	199. 3	200. 6	201. 99	202. 17x10 <sup>-4</sup>	203. 17x10 <sup>-6</sup>	204. 1.49	205. -1	
206.	PCB	207. 01336-36-3	208.	209.	210.	211. 94	212. 6	213. 99	214.	215.	216.	217.	
218.	PCDD/PCDF TOTAL	219. 01746-01-6	220.	221.	222.	223. 94	224. 6	225. 99	226.	227.	228.	229.	
230.		231.	232.	233.	234.	235.	236.	237.	238.	239.	240.	241.	
242.		243.	244.	245.	246.	247.	248.	249.	250.	251.	252.	253.	
254.		255.	256.	257.	258.	259.	260.	261.	262.	263.	264.	265.	

76 • 19 • 4 (10/79)



4 <input type="checkbox"/> COMMERCIAL C <input type="checkbox"/> UTILITY F <input type="checkbox"/> MUNICIPAL I <input type="checkbox"/> RESIDENTIAL 5 <input checked="" type="checkbox"/> INDUSTRIAL D <input type="checkbox"/> FEDERAL G <input type="checkbox"/> EDUC INST J <input type="checkbox"/> OTHER		LICENSE NO. _____		25 START UP DATE <u>01/61</u>		26 DRAWING NUMBERS OF PLANS SUBMITTED <u>A-11-690-600</u>	
NAME & TITLE OF OWNERS REPRESENTATIVE <b>Joseph A. Juszkwicz</b> <b>Sr. Environmental Engineer</b>		18 TELEPHONE <b>716-28678-7477</b>		18 SIGNATURE OF OWNERS REPRESENTATIVE OR AGENT WHEN APPLYING FOR A PERMIT TO CONSTRUCT _____		27 PERMIT TO CONSTRUCT A <input type="checkbox"/> NEW SOURCE B <input type="checkbox"/> MODIFICATION	
29 EMISSION POINT ID <b>U 7 6 0 1</b>		30 GROUND ELEVATION (FT) <b>570</b>		31 HEIGHT ABOVE STRUCTURES (FT) <b>32</b>		32 STACK HEIGHT (FT) <b>67</b>	
33 INSIDE DIMENSIONS (IN) <b>36</b>		34 EXIT TEMP (°F) <b>85</b>		35 EXIT VELOCITY (FT/SEC) <b>16.3</b>		36 EXIT FLOW RATE (ACFM) <b>6900</b>	
37 SOURCE CODE <b>3301</b>		38 HRS/DAY <b>24</b>		39 DAYS/YR <b>350</b>		40 % OPERATION BY SEASON Winter Spring Summer Fall <b>2 5 2 5 2 5 2 5</b>	

DESCRIBE PROCESS OR UNIT  
 System is a high temperature incinerator for the thermal decomposition of waste chloro-organic and fluoro-organic residues. Steam is injected together with air and residue to form HCl rather than Cl<sub>2</sub> for chlorinated residues, or HF rather than F<sub>2</sub> for fluorinated residue. A rapid gas quench prevents the decomposition of HCl to Cl<sub>2</sub> by the Deacon mechanism. A packed tower water scrubber removes HCl and HF from the vent gases

EMISSION CONTROL EQUIPMENT ID	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED MONTH / YEAR	USEFUL LIFE
ST-1	11	National Carbon Corp.	7	01/61	40
PT-1	15-	National Carbon Corp.	7	01/61	40

CALCULATIONS  
 o See separate 76-19-4 forms for Combustion Chambers No. 1 and No. 2.  
 o Section F below reflects maximum operation of combustion chamber No. 2.

CONTAMINANT		INPUT OR PRODUCTION	UNIT	ENV. RATING	EMISSIONS				% CONTROL EFFICACY	HOURLY EMISSIONS (LBS/Hr)		ANNUAL EMISSIONS (LBS/YR)			
NAME	CAS NUMBER				ACTUAL	UNIT	HOW OFT	PERMISSIBLE		ERP	ACTUAL	ACTUAL	10 <sup>1</sup>	PERMISSIBLE	
54	Carbon Tetrachloride	55 0 0 0 5 6 2 3 5	56	57	58 A	59 0.016	60 1	61 1	62 .016	63 99.99	64 280	65 0.016	66 1.3	67 2	68 1.3
69	Tetrachloroethylene	70 0 0 1 2 7 1 8 4	71	72	73 A	74 0.11	75 2	76 1	77 .11	78 99.99	79 1030	80 0.001	81 1.0	82 0	83 1.0
84	Hexachlorocyclopentadiene	85 0 0 0 7 7 4 7 4	86	87	88 A	89 0.06	90 2	91 1	92 .06	93 99.99	94 610	95 0.001	96 1.0	97 0	98 1.0
99	Chlorotoluenes	100 N Y 4 2 0 0 0 0	101	102	103 A	104 0.002	105 1	106 1	107 .002	108 99.99	109 2400	110 0.002	111 1.7	112 1	113 1.7
114	Hydrogen Chloride	115 0 7 6 4 7 0 1 0	116	117	118 B	119 4.2	120 1	121 1	122 4.2	123 > 99	124 1590	125 4.2	126 3.5	127 4	128 3.5
129	Chlorine	130 0 7 7 8 2 5 0 5	131	132	133 A	134	135 94	136 1	137	138	139	140 0.04	141 3.4	142 2	143 3.4

SOLID FUEL TONS/YR		%S	LIQUID FUEL THOUSANDS OF GALLONS/YR		%S	GAS THOUSANDS OF CF/YR		BTU/CF	APPLICABLE RULE	APPLICABLE RULE
144	145	146	147	148	149	150	151	152	153. 212	154.

Upon completion of construction sign the statement listed below and forward to the appropriate field representative  
 THE PROCESS, EXHAUST OR VENTILATION SYSTEM HAS BEEN CONSTRUCTED AND WILL BE OPERATED IN ACCORDANCE WITH STATED SPECIFICATIONS AND IN CONFORMANCE WITH ALL PROVISIONS OF EXISTING REGULATIONS.

156 LOCATION CODE <b>2911100</b>	157 FACILITY ID NO. <b>0118</b>	158 U.T.M. (E) <b>1711</b>	159 U.T.M. (N) <b>7779</b>	160 SIC NUMBER <b>2810</b>	161 DATE APPL. RECEIVED <b>1/19/90</b>	162 DATE APP. REVIEWED <b>1/19/90</b>	163 REVIEWED BY <b>Stella, PE.</b>
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PERMIT TO CONSTRUCT			
164 DATE ISSUED <b>1/19/90</b>	165 EXPIRATION DATE <b>1/19/93</b>	166 SIGNATURE OF APPROVAL <b>Paul Juszkwicz</b>	167 FEE

CERTIFICATE TO OPERATE			
168 DATE ISSUED <b>07/23/90</b>	169 EXPIRATION DATE <b>06/30/93</b>	170 SIGNATURE OF APPROVAL <b>Paul Juszkwicz</b>	171 FEE

SPECIAL CONDITIONS:	
1. SEE ATTACHED PERMIT CONDITIONS "AIR-dated 1/19/90"	2. PERMIT CONDITIONS EMISSION POINT 47601
3.	4.
5.	6.
7.	8.



1. NAME & TITLE OF OWNERS REPRESENTATIVE: Joseph A. Juskiewicz, Sr. Environmental Engineer. 2. TELEPHONE: 716-278-7477. 25. START UP DATE: MO / YR. 26. DRAWING NUMBERS OF PLANS SUBMITTED. 27. PERMIT TO CONSTRUCT: A [ ] NEW SOURCE, B [ ] MODIFICATION. 28. CERTIFICATE TO OPERATE: A [ ] NEW SOURCE, B [ ] MODIFICATION, C [ ] EXISTING SOURCE.

29. EMISSION POINT ID: U 7 6 0 1. 30. GROUND ELEVATION (FT). 31. HEIGHT ABOVE STRUCTURES (FT). 32. STACK HEIGHT (FT). 33. INSIDE DIMENSIONS (IN). 34. EXIT TEMP (°F). 35. EXIT VELOCITY (FT/SEC). 36. EXIT FLOW RATE (ACFM).

37. SOURCE CODE. 38. HRS/DAY. 39. DAYS/YR. 40. % OPERATION BY SEASON: Winter, Spring, Summer, Fall. 41. DESCRIBE PROCESS OR UNIT.

42. EMISSION CONTROL EQUIPMENT ID. 43. CONTROL TYPE. 44. MANUFACTURERS NAME AND MODEL NUMBER. 45. DISPOSAL METHOD. 46. DATE INSTALLED MONTH / YEAR. 47. USEFUL LIFE.

CONTAMINANT																
NAME		CAS NUMBER		INPUT OR PRODUCTION	UNIT	ENV. RATING	EMISSIONS				% CONTROL EFFICACY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)		
							ACTUAL	UNIT	HOW DET.	PERMISSIBLE		ERP	ACTUAL	ACTUAL	PERMISSIBLE	
54	Hydrogen Fluoride	55	0 7 6 6 4 - 3 9 - 3	56	57	58	59	60	61	62	63	64	65	66	67	68
						A	1.2	1	1	1.2	> 99	310	1.2	±5.2	3	5.2
69	Particulates <sup>c</sup>	70	N Y 0 7 5 - 0 0 - 0	71	72	73	74	75	76	77	78	79	80	81	82	83
						B	0.01	20	1	0.01	0	0.60	0.60	5.04	3	5.04
84	Sulfur Dioxide	85	0 7 4 4 6 - 0 9 - 5	86	87	88	89	90	91	92	93	94	95	96	97	98
						B		94	9					2.0	2	2.0
99	PCDD/PCDF Total *	100	0 1 7 4 6 - 0 1 - 6	101	102	103	104	105	106	107	108	109	110	111	112	113
						A		94	1					4.5	-5	4.5
114	Metals **	115	- -	116	117	118	119	120	121	122	123	124	125	126	127	128
129	Polychlorinated Biphenyls	130	0 1 3 3 6 - 3 6 - 3	131	132	133	134	135	136	137	138	139	140	141	142	143
						A	6.6	3	1	6.6	99.99+	396	0.001	5.5	-2	5.5

144. TYPE. 145. SOLID FUEL TONS/YR. 146. %S. 147. TYPE. 148. LIQUID FUEL THOUSANDS OF GALLONS/YR. 149. %S. 150. TYPE. 151. GAS THOUSANDS OF CF/YR. 152. BTU/CF. 153. APPLICABLE RULE. 154. APPLICABLE RULE.

155. SIGNATURE OF AUTHORIZED REPRESENTATIVE OR AGENT: Joseph A. Juskiewicz. DATE: 9/22/88.

156. LOCATION CODE. 157. FACILITY ID. NO. 158. U.T.M. (E). 159. U.T.M. (N). 160. SIC NUMBER. 161. DATE APPL. RECEIVED. 162. DATE APPL. REVIEWED. 163. REVIEWED BY.

PERMIT TO CONSTRUCT. 164. DATE ISSUED. 165. EXPIRATION DATE. 166. SIGNATURE OF APPROVAL. 167. FEE. 168. 1. DEVIATION FROM APPROVED APPLICATION SHALL VOID THIS PERMIT. 2. THIS IS NOT A CERTIFICATE TO OPERATE. 3. TESTS AND/OR ADDITIONAL EMISSION CONTROL EQUIPMENT MAY BE REQUIRED PRIOR TO THE ISSUANCE OF A CERTIFICATE TO OPERATE.

CERTIFICATE TO OPERATE. 169. DATE ISSUED. 170. EXPIRATION DATE. 171. SIGNATURE OF APPROVAL. 172. FEE. 173. 1. [ ] INSPECTED BY. DATE. 2. [ ] INSPECTION DISCLOSED DIFFERENCES AS BUILT VS. PERMIT, CHANGES INDICATED ON FORM. 3. [ ] ISSUE CERTIFICATE TO OPERATE FOR SOURCE AS BUILT. 4. [ ] APPLICATION FOR C.O. DENIED. DATE. INITIALED.

174. SPECIAL CONDITIONS: 1. 2. 3. 4. 5. 6. 7. 8.



OP LOCATION FACILITY EMISSION POINT UNIT I.D.  
 A 2 9 1 1 0 0 0 1 1 8 U 7 6 0 1 I 0 1



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Unit #1 (Pg 1 of 2)

PLEASE PRINT OR TYPE

S E C. H	175	EMISSION POINT I.D.	176	UNIT I.D.
	U	7 6 0 1 0	1	1

177.	SOURCE CODE	178 HRS/DAY	179 DAYS/YR	180 % OPERATION BY SEASON Winter Spring Summer Fall			
		24	350	2.5	2.5	2.5	2.5

S E C. I	181.	DESCRIBE PROCESS OR UNIT	2.
	3.	Combustion Chamber No. 1 is an installed X spare and will be operated on an as needed basis.	4.
	5.		6.
	7.		8.

S E C. J	EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182	183 99	184	185	186 /	187
	188	189	190	191	192 /	193

S E C T I O N K	CALCULATIONS
	Carbon Tetrachloride, Tetrachloroethylene and Hexachlorocyclopentadiene emissions are based on data from Table 5-9 of the Process Waste Trial Burn. These are worst case conditions, which are also low probability occurrences.
	Sample Calculation: ERP = POHC Input (Maximum of Runs 1-6) = 890 g/min x 1 lb/454 g x 60 min/hr = 120 lb/hr (CCl <sub>4</sub> )
	Actual Emissions = POHC output (Maximum of Runs 1-6) = 0.023 g/min x 1 lb/454g x 60 min/hr = 0.003 lb/hr (CCl <sub>4</sub> )
	Chlorotoluenes is used as a generic term for chloro- and fluoro-aromatic hydrocarbons. ERP = 21 lb/min (Ave. of Runs 1-3) x 60 min/hr = 1260 lb/hr Actual Emission = 1260 x (1-.999999) = 0.001 lb/hr

S E C T I O N L	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 <sup>1</sup>
194	Carbon Tetrachloride	0 0 0 5 6- 2 3 - 5	196.	197.	198	199.	200.	201.	202	203	204	205
					0.003	1	1	99.99+	120	0.003	2.5	1
206	Tetrachloroethylene	0 0 1 2 7- 1 8 - 4	208.	209.	210.	211.	212.	213.	214.	215	216	217
					0.17	2	1	99.99+	340	0.001	1.4	0
218	Hexachlorocyclopentadiene	0 0 0 7 7- 4 7 - 4	220.	221.	222.	223.	224.	225.	226.	227	228	229
					0.06	2	1	99.99+	190	0.001	1.0	0
230	Chlorotoluenes	N.Y. 4, 20, - 0, 0 - 0	232.	233.	234.	235.	236.	237.	238	239	240	241
					0.001	1	1	99.99+	1260	0.001	8.4	0
242	Hydrogen Chloride	0 7 6 4 7- 0 1 - 0	244.	245.	246.	247.	248.	249.	250	251	252	253
					1.4	1	1	>99	630	1.4	1.2	4
254	Chlorine	0 7 7 8 2- 5 0 - 5	256.	257.	258.	259.	260.	261.	262.	263	264	265
						94	1			0.01	8.4	1



OP LOCATION FACILITY EMISSION POINT UNIT I.D.  
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S E C. H	175	EMISSION POINT I.D.	176	UNIT I.D.
	U	7 6 0 1	0 1	

N.Y.S. DEPT. OF  
 ENVIRONMENTAL CONSERVATION  
 REGION 3

177. SOURCE CODE	178. HRS/DAY	179. DAYS/YR	OPERATION BY SEASON			
	24	350	Winter	Spring	Summer	Fall
			25	25	25	25

S E C. I	181.	DESCRIBE PROCESS OR UNIT	1.	2.
			3.	4.
			5.	6.
			7.	8.

S E C. J	EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182	183 99	184	185	186 /	187
	188	189	190	191	192 /	193

## CALCULATIONS

Hydrogen Chloride emissions based on data from Table 5-12 of the Process Waste Trial Burn

ERP = Chlorine Input (Maximum of Runs 1-6)

= 4620 g/min x 1 lb/454g x 60 min/hr x 36.5/35.5 = 630 lb/hr

Actual Emission = Chloride Output (Maximum of Runs 1-6)

= 10 g/min x 1 lb/454 g x 60 min/hr x 36.5/35.5 = 1.4 lb/hr

Chlorine Actual Emissions based on ratio of chlorine to total chloride from Table 5-10.

Example: Run 1A 1.3 mgCl<sub>2</sub>/100 mg cl = 0.01 x 1.4 lb/hr HCl = 0.01 lb/hr

Hydrogen Fluoride ERP (1978 Test Data) = 295 lb/hr F x 20 (HF)/19 (F) = 310 lb/hr

HF Actual Emissions = 1.2 lb/hr

S E C. I O N L	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 <sup>4</sup>
	194 Hydrogen Fluoride	195 0 7 6 6 4 - 3 9 - 3	196	197	198 1.2	199 1	200 1	201 > 99	202 310	203 1.2	204 5.2	205 3
	206 Particulates	207 N Y 0 7 5 - 0 0 - 0	208	209	210 0.01	211 20	212 1	213 0	214 0.60	215 0.60	216 5.04	217 3
	218 Sulfur Dioxide	219 0 7 4 4 6 - 0 9 - 5	220	221	222	223 94	224 9	225	226	227	228 2.0	229 2
	230 PCDD/PCDF Total*	231 0 1 7 4 6 - 0 1 - 6	232	233	234	235 94	236 1	237	238	239	240 1.3	241 -4
	242 Metals**	243 - -	244	245	246	247	248	249	250	251	252	253
	254	255	256	257	258	259	260	261	262	263	264	265

Continuation Section K - Unit 1

HF annual emissions based on 180 operating days for fluorinated waste.

Particulate ERP and Actual Emissions are based on results presented in Table 1-1 of the Process Waste Trial Burn.

$$0.01 \text{ gr/dscf} \times 6900 \text{ dscf/min} \div 7000 \text{ gr/lb} \times 60 \text{ min/hr} = 0.60 \text{ lb/hr}$$

Sulfur Dioxide emissions generated from sulfur present in fuel oil and process/laboratory wastes. Annual emission assumes 90% removal on ERP of 2000 lb/yr. from fuel oil and wastes.

\*PCDD/PCDF Totals are taken from Table 5-13 (Average of runs 1,2,4,5)

Actual Emission = 0.62 ng/dscm

$$0.62 \text{ ng/dscm} \times 6900 \text{ dscf/min} \times 1 \text{ dscm/35.315 dscf} \times 60 \text{ min/hr} = 7268 \text{ ng/hr}$$

$$7268 \text{ ng/hr} = 7.3 \times 10^{-6} \text{ g/hr} \times 1 \text{ lb/454g} = 1.6 \times 10^{-8} \text{ lb/hr}$$

\*\*Metals - See Part 373 permit Module VI.C.9 MCFR's (lb/min) for "Existing APCE".

OP LOCATION FACILITY EMISSION POINT UNIT I.D.  
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Unit #2 (Pg 1 of 2)

PLEASE PRINT OR TYPE

S E C. H	175	EMISSION POINT I.D.	176	UNIT I.D.
	U	7 6 0 1	0	2

177. SOURCE CODE	178. HRS/DAY	179. DAYS/YR	180 % OPERATION BY SEASON			
	24	350	Winter	Spring	Summer	Fall
			25	25	25	25

S E C. I	181  DESCRIBE PROCESS OR UNIT	1. Combustion Chamber No. 2 is the primary unit and will be operated a majority of the time.	2.
		3.	4.
		5.	6.
		7.	8.

S E C. J	EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER	DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
	182	183 99	184	185	186 /	187
	188	189	190	191	192 /	193

CALCULATIONS

Carbon Tetrachloride, Tetrachloroethylene and Hexachlorocyclopentadiene emissions are based on data from Table 5-9 of the Process Waste Trial Burn. These are worst case conditions, which are also low probability occurrences.

Sample Calculation: ERP = POHC Input (Maximum of Runs 7-12)  
 = 2100 g/min x 1 lb/454g x 60 min/hr  $\approx$  280 lb/hr (CCl<sub>4</sub>)

Actual Emission = POHC Output (Maximum of Runs 7-12)  
 = 0.12g/min x 1 lb/454g x 60 min/hr = 0.016 lb/hr

Chlorotoluenes is used as a generic term for chlor- and fluoro- aromatic hydrocarbons.  
 ERP = 40 lb/min (Ave. of Runs 10-12) x 60 min/hr = 2400 lb/hr  
 Actual Emission = 2400 lb/hr x (1-.999999) = 0.002 lb/hr.

S E C. T I O N L	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 <sup>3</sup>
194	Carbon Tetrachloride	0 0 0 5 6 - 2 3 - 5	196	197	198 0.016	199 1	200 1	201 99.99+	202 280	203 0.016	204 1.3	205 2
206	Tetrachloroethylene	0 0 1 2 7 - 1 8 - 4	208	209	210 0.11	211 2	212 1	213 99.99+	214 1030	215 0.001	216 1.0	217 0
218	Hexachlorocyclopentadiene	0 0 0 7 7 - 4 7 - 4	220	221	222 0.06	223 2	224 1	225 99.99+	226 610	227 0.001	228 1.0	229 0
230	Chlorotoluenes	N Y 4 2 0 - 0 0 - 0	232	233	234 0.002	235 1	236 1	237 99.99+	238 2400	239 0.002	240 1.7	241 1
242	Hydrogen Chloride	0 7 6 4 7 - 0 1 - 0	244	245	246 4.2	247 1	248 1	249 >99	250 1590	251 4.2	252 3.5	253 4
254	Chlorine	0 7 7 8 2 - 5 0 - 5	256	257	258 94	259 1	260 1	261	262	263 0.04	264 3.4	265 2



OP LOCATION FACILITY EMISSION POINT J UNIT I.D.  
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Unit #2 (Pg 2 of 2)

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S	175	EMISSION POINT I.D.				176	UNIT I.D.			
E										
C										
H		U	7	6	0	1	0	2		

177. SOURCE CODE	178. HRS/DAY	179. DAYS/YR	180. % OPERATION BY SEASON			
			Winter	Spring	Summer	Fall
	24	350	25	25	25	25

S E C I	181.  DESCRIBE PROCESS OR UNIT	1.	2.
		3.	4.
		5.	6.
		7.	8.

EMISSION CONTROL EQUIPMENT I.D.	CONTROL TYPE	MANUFACTURER'S NAME AND MODEL NUMBER		DISPOSAL METHOD	DATE INSTALLED	USEFUL LIFE
182	183 99	184		185	186 /	187
188	189	190		191	192 /	193

CALCULATIONS

Hydrogen Chloride emissions based on data from Table 5-12 of the Process Waste Trial Burn.

ERP = Chlorine Input (Maximum of Runs 7-12)

= 11,700 g/min x 1 lb/454g x 60 min/hr x 36.5/35.5 = 1590 lb/hr

Actual Emission = Chloride Emission Rate (Maximum of Runs 7-12)

= 31 g/min x 1 lb/454 g x 60 min/hr x 36.5/35.5 = 4.2 lb/hr.

Chlorine Actual Emissions based on ratio of chlorine to total chloride from Table 5-10.

Example: Run 9A 2.7 mg Cl<sub>2</sub>/300 mgCl = 0.01 x 4.2 lb/hr. HCl = 0.04 lb/hr.

Hydrogen Fluoride ERP (1978 Test Data) = 295 lb/hr F x 20(HF)/19(F) = 310 lb/hr

HF Actual Emission (1978 Test Data) = 1.2 lb/hr.

	CONTAMINANT		INPUT OR PRODUCTION	UNIT	EMISSIONS			% CONTROL EFFICIENCY	HOURLY EMISSIONS (LBS/HR)		ANNUAL EMISSIONS (LBS/YR)	
	NAME	CAS NUMBER			ACTUAL	UNIT	HOW DET.		ERP	ACTUAL	ACTUAL	10 <sup>1</sup>
194	Hydrogen Fluoride	0 7 6 6 4 - 3 9 - 3	195	197	1.2	1	200	>99	310	1.2	5.2	3
206	Particulates@	N Y 0 7 5 - 0 0 - 0	207	209	0.01	20	212	0	0.60	0.60	5.04	3
218	Sulfur Dioxide	0 7 4 4 6 - 0 9 - 5	219	221		94	224	9			2.0	2
230	PCDD/PCDF Total*	0 1 8 4 6 - 0 1 - 6	231	233		94	236	1			4.5	-5
242	Metals**		243	245			248					
254	Polychlorinated Biphenyls	0 1 3 3 6 - 3 6 - 3	255	257	6.6	3	260	99.99+	396	0.001	5.5	-2

Continuation Section K - Unit 2

HF annual emissions based on 180 operating days for fluorinated waste.

Particulate ERP and Actual Emissions are based on results presented in Table 1-1 of the Process Waste Trial Burn.

$$0.01 \text{ gr/dscf} \times 6900 \text{ dscf/min} : 7000 \text{ gr/lb} \times 60 \text{ min/hr} = 0.60 \text{ lb/hr}$$

@ Particulate ERP and Actual Emissions based on results presented in Table 1-1 of the NAPL Trial Burn are:

$$0.0287 \text{ gr/dscf} \times 6900 \text{ dscf/min} : 7000 \text{ gr/lb} \times 60 \text{ min/hr} = 1.7 \text{ lb/hr}$$

Sulfur Dioxide emissions generated from sulfur present in fuel oil and process/laboratory wastes. Annual emission assumes 90% removal on ERP of 2000 lb/yr. from fuel oil and wastes.

\* PCDD/PCDF Totals are taken from Table ~~C-1~~, DEIS.

\*\* Metals - See Part 373 permit Module VI.C.9 MCFR's (lb/min)  
for "Existing APCE".



JANUARY 19, 1990

1

AIR PERMIT CONDITIONS - EMISSION POINT U7601

1. Operation of the incinerator facility will be in accordance with the Hazardous Waste Management Facility Part 373 permit.
2. Only properly trained and authorized personnel will be involved in the maintenance and operation of the residue incinerator and transportation/storage of the feedstock.
3. Operation of this unit alone or in combination with other point source emissions shall not cause contravention of any acceptable Guideline concentration, as published in Air Guide 1.
4. The applicant shall collect and split an as-fired chemical waste sample with this Agency, upon request.
5. New, modified, or off-site generated wastes to be destructed in this unit must receive prior review and written approval from this office.
6. Natural gas or fuel oil meeting Part 225 requirements may be used to preheat the reactor to achieve the proper operating exit temperatures, as stated in the Part 373 permit.
7. Fluoride feed rate to the incinerator combustion chamber shall not exceed 295 lbs/hr. (Emission rate potential of Hydrogen fluoride shall not exceed 310 lbs/hr). Fluoride emissions testing must be conducted upon completion of the APC system required in condition #10 of this permit.
8. Deviation from any of the conditions listed above will be sufficient grounds for termination of the Certificate to Operate Emission Point U7601, the residue incinerator.
9. Only one incinerator unit can be operated at a time.  
Remedial waste can only be incinerated in Unit #2.
10. Submission of an air permit to construct application and upgrade of the air pollution control equipment (APCE) for this incinerator capable of attaining 99 percent metals removal efficiency or best available control technology (BACT) and also capable of controlling HCl emissions to BACT not to exceed 0.71 g/sec. will be required according to the following schedule:

See Attachment J: Compliance Schedule contained in Part 373 permit module VI.

11. (A) The Permittee shall submit within 60 days of the effective date of this Permit, sufficient funds to cover the cost of establishing & maintaining the Department's On-Site Environmental Monitoring Program for the incinerator & associated units. The sum of such payment shall be based on the Department's estimate of annual costs for 1 person (salary grade 24) and is subject to quarterly revision. The Program shall consist of Department staff, whose function shall be to monitor compliance with the conditions of this permit.

(B) B. Parameters to be MOnitored and Reporting Requirements

The On-Site Environmental Monitor will monitor all hazardous waste incineration activities and processing operations generating toxic waste for incineration to assure compliance with all Department rules, regulations and permit conditions as follows:

1. All permit conditions (part 201 permit and part 373 permit incineration module).
2. Extraction, collection and transport, and storage of all wastes for incineration to include:
  - a) Niagara Plant generated process wastes and off-site generated process wastes permitted on the renewal part 201 & 373 permits.
  - b) All OCC off-site generated wastes to include remedial site wastes.



C. Functions of Responsibilities of On-Site Environmental Monitor

1. Training

- a. 40 hr OSHA certification
- b. OCC orientation health and safety requirements
- c. EPA Air Pollution Incineration and other air pollution related courses
- d. Visible Emission Training
- e. Attend formal and informal DEC workshops on incineration and related air pollution topics
- f. Semi-annual performance evaluation

2. Reports & Meetings

- a. Daily Reports
- b. Weekly Activity Reports
- c. Monthly Activity Reports
- d. Automobile report, expense reports and time and attendance report (bi-weekly)
- e. Attend meetings on review of projects that involve incineration. Pilot studies, equipment replacement, etc.
- f. Coordinate TAGA visit to site
- g. Attend weekly staff meeting in Region 9 office
- h. NYSDEC semi-annual program review
- i. Document and prepare case reports on permit violations and assist in legal enforcement activities

3. Inspections

I. Residue Incinerator

Perform inspection of residue incinerator for compliance with all permit conditions on a daily basis.

Monitor for:

- 1. Control Room operations
- 2. Incinerator Operating parameters

3. Stack emissions including opacity
4. Scrubber discharges
5. Malfunctions and breakdowns. Cross-check malfunctions with OCC computer print out of system operation.
6. Maintenance and preventative maintenance operations
7. Spillage of hazardous wastes and clean-up procedures to assure that spilled materials are handled properly.
8. Obtain samples of waste feed to incinerator on a weekly basis and prepare laboratory analysis request forms. Samples to be analyzed by OCC on-site or sent to outside laboratory for analysis with cost to be incurred by OCC.

## II. Waste Receipts

Perform inspections as necessary to monitor all areas where hazardous wastes are extracted, collected, transported and stored for incineration in OCC's Buffalo Avenue facility.

1. Monitor gate receipts to assure that toxics wastes received conform with manifest and that identification assures that wastes are authorized for compliance with permit conditions.
2. Obtain samples of gate receipt wastes (on site and off site generated wastes) on a weekly basis for analysis by OCC or DOH for confirmation analysis that wastes can be incinerated in the residue incinerator in compliance with existing permits.
3. Monitor and inspect all Buffalo Avenue plant processing operations generating waste for incineration.
4. Monitor and inspect all remedial and off site operations generating waste for incineration.
5. Monitor tank farm and rail-truck unloading facility to include checking liquid levels in tanks (for over filling and spillage), tank trucks and sumps; checking waste storage tank nitrogen blanketing, checking for fugitive organic vapor emission and monitoring carbon canister control devices on storage tanks for breakthrough of toxic emissions.

6. Perform portable ambient sampling around perimeter of site for VOC's and particulates (PM-10). Maintain inventory of supplies and spare parts for calibrating and repairing all portable sampling instrumentation.
7. Perform oversight of OCC's meteorological equipment and check on readiness of OCC "SAFER" system weekly.

### III. Laboratory

1. Review and check the OCC facility laboratory analytical methods and analytical test results. Assure that instruments are properly clean, that control tests are run and that calibrations are performed properly.
2. Monitor all chemical sampling procedures including spot checks of waste sampling to assure that layered or phased wastes are sampled from top to bottom and that proper analytical tests are performed to verify waste composition.

### 4. Permits and Modifications Source Testing

- a. Assist technical review of the renewal permit as well as plans and drawings for pilot studies and modifications for the residue incinerator permit.
- b. Assist technical review of all OCC Buffalo Avenue process permits directly associated with wastes generated for incineration.
- c. Assist in technical review of other OCC facility process permits directly associated with wastes generated for incineration.
- d. Review stack test protocols, stack test reports, and perform stack test witnessing for all compliance testing of the residue incinerator.



D.

On-Site Environmental Monitor Agreement

The Permittee shall submit to the Department sufficient funds to cover the cost of establishing and maintaining the Department's On-Site Environmental Monitoring Program for the facility. The Program shall consist of NYSDEC staff referred to herein as "NYSDEC monitor" whose function shall be to monitor compliance with the conditions of the Part 201 Certificate to Operate Air Emission Source permit and part 373 permit incineration module on a full time basis at the facility. In addition to on-site work, NYSDEC monitor's time chargeable to the program shall include off-site work, that is directly related to the monitoring function, including training, report review, meetings and briefings but does not include the costs incurred by the Department for off-site oversight of the NYSDEC monitor work by supervisors or other Department personnel. Chargeable time for training shall not exceed the typical range of training given to a typical NYSDEC monitor per year with comparable responsibilities. The Department may initiate this program on the effective date of this permit.

The sum of the above payments shall be based on the Department's estimate of annual costs for (1) staff person at salary grade 24; and are subject to quarterly revision. The number of staff persons may exceed (1) at any time, as long as the annual direct personal service cost does not exceed the direct personal service costs of (1) staff person for monitoring compliance with this permit at the job rate for the salary grade indicated. The initial account balance shall be sufficient to meet the next nine months of anticipated expenses.

The first payment shall also include funds to cover the cost of purchasing a vehicle. In addition, the Permittee will be charged an agreed upon annual per mile rate for those miles logged on that vehicle for monitoring compliance with this permit which represents full compensation for maintenance and operation cost. The Department will credit the amount at an annual agreed upon rate per mile for each mile it uses the vehicle for projects unrelated to monitoring compliance with this permit which represents full compensation for depreciation. The Permittee will make additional payments to the account at an agreed upon per mile rate for each mile logged by the NYSDEC monitors in other vehicles in monitoring compliance with this permit which represents full compensation for depreciation, maintenance and operation costs.

The total expenses for the first year of the Program are anticipated to be approximately \$109,200. As first payment, the Permittee shall submit the sum of \$81,900 within 60 days of the effective date of this permit. Quarterly payment shall be made for the duration of this permit in accordance with the following provisions.

The costs to be covered by this fund shall include:

1. Direct personal service costs and fringe benefits.
2. Direct non-personal service costs, including purchase of a vehicle, if necessary, and its full operating costs.
3. Inflation increases.
4. Overhead or support costs at the approved Federal Indirect Cost Rate.

As noted, the Department may revise the required payment on a quarterly basis to include all costs of monitoring to the Department. The quarterly revision may take into account factors such as inflation, salary increases, accrued interest to be applied to the available balance, or any change in plant operating procedures which would directly necessitate additional on-site monitoring.

Within 30 days of written notice by the Department that a payment is due, Permittee shall be forward the required payment to the Department. The notice provided by the Department shall include a "Statement of Revenues and Expenditures" and copies of the "Federal Reimbursement of Direct Personal Service" forms on which the "Statement of Revenues and Expenditures" is based. Detailed records of expenditures including time and activity records and a vehicle usage log will be made available for Permittee's inspection and copying upon request within 5 days.

Payment should be sent to the New York State Department of Environmental Conservation, Bureau of Federal and Municipal Accounts, 50 Wolf Road, Albany, New York 12233-0001. Payments are to be made in advance of the period in which they will be expended.

At the termination of operation pursuant to this permit and payment of any outstanding costs, the unexpended balance, including interest, will be return to the Permittee. At that time, the vehicle will either be returned to the Permittee or the Department may, at its election, credit the account in an amount representing the current value of the vehicle.

The Permittee shall provide the NYSDEC monitoring staff with suitable office space, utilities and telephone service.

The Department will be advised by the Permittee of the schedule for general safety training which is normally given to new site employees. The NYSDEC monitors will be given the option of attending such training course. This training will be a supplement to the mandatory safety training which the NYSDEC monitors shall receive from the Department.

The Permittee shall furnish NYSDEC with three copies of the current site policy and procedures manual for health and safety issues. The Permittee shall notify the Department in writing each time a change to the health and safety plan is made.



**MODULE VI  
INCINERATION**

- A. Design. The Permittee shall maintain the facility in accordance with the attached design plans and specifications, Attachments F and I, or equivalent.
1. Modifications will be made to the residue reactor system and a new waste unloading and storage area constructed in accordance with Attachments F and I according to the schedule specified in Attachment J.
  2. In accordance with the schedule in Attachment J, the Permittee shall; (a) complete a feasibility study for the purpose of evaluating and selecting air pollution control equipment (APCE) capable of attaining 99 percent or greater removal efficiencies for metals or best available control technology (BACT) and also capable of controlling HCl emissions to BACT not to exceed 0.71 g/sec; (b) install the selected APCE with a minimum stack height of 100 feet; (c) conduct an operational shakedown of the system under conditions approved in writing by the Department; (d) conduct particulate and HCl tests; and (e) perform a comprehensive trial burn under conditions approved in writing by the Department to demonstrate the performance capabilities of the upgraded incinerator system.

Within one week of the completion of the particulate and HCl tests, the Permittee shall submit to the Department the results of those tests. If the test results indicate that the particulate and HCl emission levels are less than or equal to the levels demonstrated by the existing system, and upon written approval by the Department, wastes may be incinerated in accordance with the limitations of Condition (VI.C) below with waste feed rates limited by Condition (VI.C.9.a) and other applicable limitations. Prior to receiving this written approval, no remedial wastes may be incinerated using the upgraded APCE, except during the tests, if needed. The incinerator will be operated and monitored in accordance with Condition (VI.D) below as modified in writing by the Department to reflect the characteristics of the APCE selected and installed (both during the shakedown period and after).

After the evaluation and approval of the comprehensive trial burn report, the Department will modify (if necessary) the maximum constituent feed rates (MCFRs) given in Condition (VI.C.9.b) and authorize in writing, the incineration of wastes at feed rates to be limited by these MCFRs and other applicable waste feed limitations (e.g., ash feed rate, chlorine/fluorine feed rate, etc.).

See Attachment J of this Permit (Compliance Schedules) for additional details and milestone dates.

3. No modification to the incinerator and its APCE shall be made which would affect the achievement of the performance standards in Condition VI.B., or any other permit conditions specified in this permit, without first obtaining written approval from the Commissioner.

B. Performance Standard. The Permittee shall maintain the incinerator so that, when operated in accordance with the operating requirements specified in this permit, it will meet the following performance standards:

1. The incinerator must achieve a destruction removal efficiency (DRE) of 99.99% for each organic hazardous constituent listed in 6 NYCRR Part 371 Appendix 23 in each waste feed with the exceptions of polychlorodibenzo-p-dioxins (PCDD), polychlorodibenzofurans (PCDF), and polychlorinated biphenyls (PCB). For PCDD, PCDF, and PCB, the incinerator must achieve a DRE of 99.9999%. DRE shall be determined using the method specified in 6 NYCRR 373-2.15(d)(1).
2. The Permittee must control hydrogen chloride (HCl) emissions, such that the rate of emissions is no greater than the larger of either 1.8 kg/hr or 1% of the HCl in the stack gas prior to entering any pollution control equipment.
3. The incinerator must not emit particulate matter in excess of 0.08 gr/dscf when corrected to seven (7) percent oxygen in the stack gas in accordance with the formula specified in 6 NYCRR 373-2.15(d)(3) or 0.05 gr/dscf uncorrected per 6 NYCRR 212.3(c), whichever is more restrictive.
4. The combustion efficiency of the incinerator shall be at least 99.9 percent computed as follows:

Combustion efficiency =  $[\text{CO}_2 / (\text{CO}_2 + \text{CO})] \times 100$ ; where  
CO<sub>2</sub> = Concentration of carbon dioxide  
CO = Concentration of carbon monoxide.

5. Compliance with the operating conditions specified in this permit will be regarded as compliance with the above performance standards. However, evidence that compliance with such permit conditions is insufficient to ensure compliance with the above performance standards may be "information" justifying modification, suspension, or revocation of the permit pursuant to 6 NYCRR 621.14.

C. Limitation on Wastes: The Permittee shall incinerate only the following wastes and only as allowed by the terms of this permit:

1. The Permittee shall incinerate only the wastes listed in Attachment F-2 and similar wastes for which prior written approval has been obtained from the NYSDEC in accordance with the procedures and limitations in Attachment F-2.
2. The Permittee shall not incinerate any waste containing greater than 100 ppm of any organic hazardous constituent having a heat of combustion less than 0.24 kcal/gram, nor any material more difficult to burn than the Class 1 constituents listed in the USEPA Principal Hazardous Organic Constituent Thermal Stability Index (Table D-1), USEPA Guidance on Setting Permit Conditions and Reporting Trial Burn Results (January 1989).
3. The Permittee may only accept and incinerate in accordance with Attachment F-2 the following wastes:
  - a. The following Occidental Chemical Corporation (OCC) liquid process wastes:

- (1) Wastes generated at OCC facilities located in Niagara Falls, Grand Island, and North Tonawanda, New York.
  - (2) Wastes generated from the chlorine process at the OCC production facility located in Tacoma, Washington, and;
- b. The following OCC liquid remedial wastes generated as the result of remedial (including investigative) activities, including non-aqueous phase liquids (NAPL):
- (1) Wastes generated at, or presently located on or adjacent to, OCC facilities located in Niagara Falls and North Tonawanda, New York.
  - (2) Wastes presently located on or adjacent to the OCC production facility in Tacoma, Washington.
  - (3) Wastes identified pursuant to the PCB trial burns described in the PCB Trial Burn Report located on or adjacent to the OCC production facility in Taft, Louisiana.
  - (4) The segregatable portion of wastes from multi-generator disposal sites which were generated at the OCC facilities identified in (1) through (3) above.
  - (5) All wastes identified in (1) through (3) above generated as a result of integrated remedial activities undertaken at multi-generator disposal sites which are presently the subject of litigation before the U.S. District Court for the Western District of New York between EPA and/or New York State and OCC.

These wastes may include PCBs in excess of 50 ppm, PCDD, PCDF and Mirex. If any OCC process waste is ever found to contain these constituents, that process waste shall be managed as remedial waste and be governed by all conditions in this permit that apply to the wastes in this section (VI.C.3.b). The co-firing of, and/or the incineration of blends of, remedial waste with process waste and/or with fuel oil shall be governed by all conditions in this permit that apply to the wastes in this section (VI.C.3.b).

The western New York sites generating the above remedial wastes include the Hyde Park landfill; the "S-Area" landfill and other sources at the OCC Buffalo Ave., Niagara Falls plant; the 102nd St. landfill; the OCC Durez plant; and Love Canal.

- c. If the incinerator has insufficient capacity to incinerate both remedial wastes and process wastes, OCC remedial wastes from western New York will be given preference. Incineration of out-of-state wastes will in no way take up any capacity in the incinerator which must otherwise be used for OCC western New York remedial wastes to prevent delays in implementing the remedial programs.

In this permit, "Mode I" refers to operating requirements while incinerating process wastes described in Condition VI.C.3.a above.



"Mode II" refers to operating requirements while incinerating remedial wastes described in Condition VI.C.3.b above. Only Unit #2 may be used to incinerate remedial wastes.

4. The viscosity of the wastes as fed to the incinerator shall not exceed 100 centistokes.
5. The chlorine content of the wastes shall not exceed the following:
  - a. Unit #1: 48.0 percent
  - b. Unit #2:
    - Mode I: 63.0 percent
    - Mode II: 54.0 percent
6. The total fluorine feed rate shall not exceed 295 lb/hr.
7. The total ash feedrate (from all sources, e.g., waste and auxiliary fuel) to the incinerator shall not exceed the following:
  - a. Unit #1: 0.0071 lb/min (waste ash content not to exceed 0.5%)
  - b. Unit #2: 0.031 lb/min (waste ash content not to exceed 0.5%)
8. The physical form of the waste shall be a pumpable liquid.
9. All of the selected constituents listed below apply to the wastes described in Condition VI.C.3.b(remedial wastes). Only the last five selected constituents (i.e., the metals) apply to the wastes described in Condition VI.C.3.a (process wastes). The feed rate of wastes shall be limited to ensure that none of the selected constituents will be incinerated at rates exceeding the given maximum constituent feed rate (MCFR). Additionally, the sum of the ratios of each constituent's feed rate to its MCFR shall not exceed 1.25. Additional selected constituents and MCFRs may be established in accordance with Attachment A-1 of this permit (Waste Analysis Plan). Actual feed rates may be limited by other conditions in this permit (e.g. ash feed rate, chlorine content, fluorine feed rate).
  - a. Until the incinerator air pollution control equipment (APCE) has been upgraded and trial burns have been performed in accordance with Condition (VI.A.2) above and the results approved in writing by the Department, the MCFRs under "Existing APCE" apply. In addition, the feed rate of Hyde Park NAPL (RB-40) shall not exceed 5 lb./min unless it is demonstrated that the MCFRs, total ash feed rate and other permit limits would be complied with at a higher feed rate and this is approved in writing by the Department.
  - b. After the APCE has been upgraded and trial burns have been performed in accordance with Condition (VI.A.2) above and the results approved in writing by the Department, the MCFRs under "New APCE" apply, contingent upon the demonstration by OCC that all applicable trial burn requirements were met and that the new APCD achieved at least 97% control of metals. Based on the results of the trial burn, the MCFRs for the metals will be adjusted in writing by the Department, so that the emissions do not exceed the levels that would occur with 97% control (except that if greater than 99% control is achieved, the adjustment will be based on 99% control).

Selected Constituent

	MCFR(lb/min)	
	Existing APCE	New APCE
alpha-Hexachlorocyclohexane(BHC)	0.39	SAME
gamma-Hexachlorocyclohexane(BHC)	3.3	"
PCBs	18	"
Benzene	150	"
Hexachlorobenzene	2.6	"
Hexachlorobutadiene	56	"
Carbon tetrachloride	33	"
2,4,6-Trichlorophenol	218	"
Mirex	2.4	"
2,3,7,8-TCDD Equiv.	$7.5 \times 10^{-4}$	"
Arsenic	$8.9 \times 10^{-5}$	$3.6 \times 10^{-4}$
Beryllium	$3.9 \times 10^{-4}$	$1.6 \times 10^{-3}$
Cadmium	$7.3 \times 10^{-4}$	$3.0 \times 10^{-3}$
Chromium	$1.0 \times 10^{-4}$	$4.2 \times 10^{-4}$
Nickel	$8.7 \times 10^{-3}$	$3.5 \times 10^{-2}$

D. Operating Conditions and Monitoring Requirements. The Permittee shall feed the wastes described in Condition VI.C to the incinerator only under the following conditions:

1. The Permittee shall operate, monitor, test, inspect, and calibrate the incinerator system in accordance with the requirements of 6NYCRR 373-2.15(e), (f), and (g), Attachments B, and F-1, and the table below. For each interlocked parameter in the table below (i.e., those marked with an "\*"), any deviation from the specified "Operating Limit" for a period longer than the indicated "Time" limit must result in an automatic cutoff of the waste feed to the incinerator.

Twice per month, the automatic waste feed cutoff system must be tested to ensure that for each interlocked parameter, except those marked with an "@", deviations from allowed operating limits will result in an automatic waste feed cutoff. Alarms must also be tested twice per month. For interlocked parameters in the table below marked with an "@", the operation of the automatic waste feed cutoff system must be tested at least twice per year.

Parameter & Instru. No.	Location (A)	Operating Limits	Monit. Freq.	Calib. Freq.
Total Waste & Aux. Fuel Feed Rates (B) W101-105 W201-205	Waste/Fuel Feed Lines DWG.A-55119 Sheets 4,5, 6 of 11	(Maximum) Unit #1: 21 lb/min*(C) Unit #2: Mode I: 40 lb/min*(C) Mode II: 31 lb/min*(C) Time: 1 minute	Cont.	Mo.
Combustion Air Flow Rate  F-110 F-210	Comb. Air Inlets DWG.A-55119 Sheet 3 of 11	(Maximum) Unit #1: 2100 scfm* Unit #2: Mode I: 2530 scfm* Mode II: 2900 scfm* Time: 3 minutes	Cont.	Mo.
Compressed Air Pressure P-303	Air Receiver Outlet DWG.A-55119 Sheet 2 of 11	(Minimum) 70 psig* Time: Instantaneous	Cont.	Ann.
Steam Flowrate  F-101 F-201	Steam Feed Lines Sheet 1 of 11	(Maximum) Unit #1: 1600 lb/hr* Unit #2: 1960 lb/hr* Time: 1 minute	Cont.	Mo.
Reactor Body Pressure  P-106 P-206	Reactor Chambers DWG.B-56698	(Maximum)  -0.1 inch H <sub>2</sub> O, gauge*  Time: 1 minute	Cont.	Mo.
Incin. Temp (Body & Exit Temps.)  T-104,T-204 T-103,T-203	Reactor Chambers DWG.B-56698 DWG.B-56699	(Minimum exit temp.) Unit #1: 1000°C* Unit #2: Mode I: 1125°C* Mode II: 1200°C* Time: Instantaneous	Cont.	Mo.
CO  A-102A A-202A	Exit Duct DWG.A-54649	(Maximum) 50 ppm uncorrected* Time: 60 minute rolling average	Cont.	Da.



Parameter & Instru. No.	Location (A)	Operating Limits	Monit. Freq.	Calib. Freq.
O <sub>2</sub> A-102 A-202	Exit Duct DWG.A-54649	(Minimum) 7%* Time: 3 minutes  (Maximum 14%)	Cont.	Da.
Cl <sub>2</sub> A-101 A-201	Main Stack DWG.A-54649	(Maximum) 50 ppm uncorrected* Time: 5 minutes	Cont.	Wk.
CO <sub>2</sub> A-102B A-202B	Exit Duct DWG.A-54649	N/A	Cont.	Wk.
River Water Pump Press. P-302	River Water Pump Outlet DWG.A-55119 Sheet 2 of 11	(Minimum) 70 psig*  Time: Instantaneous	Cont.	Mo.
Quench Water Flowrate F-302	River Water Pump Outlet DWG.A-55119 Sheet 2 of 11	(Minimum) 140 gpm	Every hour	Ann.
Scrubber Water Flow- rate F-301	River Water Pump Outlet DWG.A-55119 Sheet 2 of 11	425 gpm $\pm$ 20 gpm	Every hour	Ann.
Scrubber Inlet Gas Temp. T-301	Scrubber Inlet DWG.A-55119 Sheet 9 of 11	(Maximum) 110°C*  	Cont.	Qtr.
Scrubber Pressure Drop N/A	Packed Scrubber DWG.A-55119 Sheet 9 of 11	0.5-2.0" H <sub>2</sub> O	Every 4 $\pm$ 1 hours	N/A
Caustic Header Pressure	Caustic Header Feed Line DWG.A-55119 Sheet 9 of 11	(Minimum) 30 psig*  Time: 1 minute	Cont.	Mo.

Parameter & Instru. No.	Location (A)	Operating Limits	Monit. Freq.	Calib. Freq.
Demister Circulation Pump Press. N/A	Circulation Pump Outlet DWG A-55119 Sheet 9 of 11	50 psig $\pm$ 10 psig	Every 4 $\pm$ 1 hours	Ann
Demister Effluent Caustic Strength N/A	Demister Eff. Prior to Make-up line DWG.A-55119	(Minimum) 50 grams of sodium hydroxide per liter (gpl)	Every 4 $\pm$ 1 hours	N/A
Caustic Make-up Flowrate	Caustic Feed Line DWG.A-55119 Sheet 9 of 11	(Waste Specific) $\pm$ 20% of flowrate that provides caustic strength > 50 gpl* Time: 5 minutes	Cont.	Mo.
Demister Water Flowrate Equip. #7	Demister Water Inlet DWG.A-55119 Sheet 9 of 11	N/A	Every 4 $\pm$ 1 hours	Ann.
Ex. Fan Inlet Static Pressure P-311	Demister Ex. DWG.A-55119 Sheet 9 of 11	-4.0 to - 8.0 in. H <sub>2</sub> O	Every 4 $\pm$ 1 hours	Ann.
Ex. Fan Motor Speed N/A	Ex. Fan DWG.A-55119 Sheet 9 of 11	(Maximum) 1200 rpm	Every 4 $\pm$ 1 hours	Ann.
Exhaust Gas Flowrate Pitot Tube	Main Stack DWG.A-54649	<u>Maximum</u> 7500 acf/min	Mo.	N/A

- (A) List of drawings including drawing revision number and revision date is specified in Attachment I of this Permit.  
 (B) The sum of all positive feed rates (waste plus auxiliary fuel) indicated by the data logger (including positive feed rates recorded for both residue burners) shall not exceed the operating limits specified in the table.  
 (C) Actual feed rate may be limited by other conditions in this permit (e.g. ash feed rate, chlorine feed rate, fluorine feed rate, MCFR).

Monit. Freq. = Monitoring Frequency : Calib. Freq. = Calibration Frequency  
 Cont. = Continuous : Mo. = monthly : Ann. = Annually: Wk.=weekly  
 Da. = Daily : Qtr. = Quarterly : N/A = Not Applicable

2. The requirements of this permit (including operating conditions, monitoring requirements, etc.) apply to hazardous waste including exempt hazardous waste, to solid waste, and to auxiliary fuel other than natural gas and fuel oil.
3. The Permittee may burn only natural gas or fuel oil when the exit temperature is less than that specified in condition VI.D.1. Other materials may not be introduced into the incinerator unless the incinerator is operating within the conditions specified in condition VI.D.
4. The Permittee must not feed waste to the incinerator unless all of the monitoring equipment for the parameters listed in Condition VI.D.1 which are interlocked for automatic waste feed cutoff and associated electronic equipment are operating properly except during daily preventive maintenance and while calibrating continuous emission monitors.
5. The Permittee may only feed wastes to the incinerator from tanks 1 through 6 and 20, and from containers (including trailers, tank trucks, portable tanks, and other containers) located within the incinerator trailer unloading area. No waste may be fed to the incinerator directly from railcars. Remedial wastes may be fed to Unit No. 2 from tanks 4, 5, 6 and 20 only.
6. No more than two feed nozzles (i.e., waste, auxiliary fuel, or combination) may be used at any one time.
7. Any "off" waste or auxiliary fuel feed pump that is not pumping waste or fuel, must cause a consistent reading on the data logger printout that is known to indicate the "off" condition (e.g. - 15.0 lb/min.).
8. Steam feed rates shall be adjusted to minimize chlorine emissions as described in Attachment F-1 Section D-11 of this Permit.
9. Only one combustion unit (i.e. chamber) may be operated at any one time. The operating unit and its associated duct work must be securely blanked off from the other unit.
10. The exit gas temperature must not exceed the incinerator body temperature.



11. Water discharged from the packed bed scrubber and the quench tower shall not be recirculated back to the packed bed scrubber or quench tower.

E.

Recordkeeping:

1. The Permittee shall record and maintain in the operating record described in Module II Condition L.1 all recordkeeping, monitoring, inspection, testing and calibration data required by this permit and 6NYCRR 373-2.15(g)(4).
2. The applicant shall record all process deviations from allowed operating limits and a summary of operations in a monthly report to be filed by the third week of the following month with the DEC Region 9 Office. At a minimum, the monthly report must address the following items:
  - a. Operating Summary
    - (1) hours each unit was operated.
    - (2) brief explanation of reason(s) for down hours
  - b. Monitor Summary
    - (1) list of parameters exceeding operating limits of condition VI.D.1.
    - (2) parameter operating limit
    - (3) monthly exceptions
    - (4) parameter interlock limit
    - (5) monthly shutdowns
    - (6) year-to-date shutdowns
  - c. Interlocked Shutdowns
    - (1) date, time, and duration of shutdown;
    - (2) data logger print-out for all monitored parameters including 2 hours before and 2 hours after shutdown (not required for shutdowns which occur during start-up or when switching wastes);
    - (3) cause of shutdown;
    - (4) corrective actions taken.
  - d. Additional Comments.

e. Weekly Inspection Summary

- (1) completed residue burner weekly inspection checklist

f. Residue Inventory

- (1) list of wastes incinerated
- (2) monthly quantity incinerated by waste code specifying source of waste feed for each (i.e. tank #, trailer tank truck, portable tank)
- (3) year-to-date quantity incinerated by waste code
- (4) quantity of each waste to be incinerated stored at the facility by waste code
- (5) quantity of remedial waste to be incinerated stored at each OCC remedial site in New York State by waste code

g. Exhaust Gas Velocity

- (1) exhaust gas velocity and exhaust gas flow rate as determined by pitot tube in accordance with condition VI.D.1.
- (3) A record shall be maintained in the operating record of the following: name and quantity of each waste incinerated, including the time period over which the waste was incinerated and the source of the waste feed (i.e. tank #, trailer, tank truck, portable tank).
- (4) A record of any replacement, maintenance or repair of an instrument listed in VI.D.1 and of any major maintenance or repair to the incinerator and its associated equipment shall be maintained in the operating record.

F. General Requirements:

1. Upon request of the Commissioner, the Permittee shall perform the tests required by 6 NYCRR 373-2.15(g)(1)(iii) and 6 NYCRR Part 202.

By January 1, 1992, the Permittee will submit a trial burn plan to the NYSDEC. The NYSDEC will review and approve, comment upon, or deny the trial burn plan within 60 days of receipt. The trial burn plan will be designed so that the performance of the incinerator may be reevaluated before the renewal of this Permit. The Permittee may conduct the trial

burn only after obtaining written authorization from the NYSDEC. Trial burn results including all back-up data must be submitted to the NYSDEC by January 31, 1993. This requirement will be reviewed by NYSDEC on July 1, 1991 to assess whether this trial burn may be combined with the trial burn required by Attachment J.

The Permittee may conduct additional trial burns or tests subject to prior written approval by the NYSDEC (and the terms of this Permit.) Trial burns or tests may be conducted to demonstrate incinerator performance while operating under modified physical operating conditions not authorized by Condition VI.D or while burning OCC wastes not authorized by Condition VI.C above.

2. The Permittee must provide representatives for the unannounced inspections of the incineration facility by the NYSDEC.
3. Analysis of the wastes to be incinerated must be performed in accordance with Attachment A-1 and 6NYCRR 373-2.15(b). On June 30 of each year, the Permittee shall submit copies of all analytical results associated with wastes that have been incinerated during the previous 12 months to the NYSDEC. After the June 30, 1990 submittal of this information, the NYSDEC will determine whether the submittal of analytical results may be discontinued for the wastes described in Condition VI.C.3.a(1).
4. Representative samples of each process waste must be analyzed in accordance with the methods in Attachment A-1 for the following metals: arsenic, beryllium, cadmium, chromium and nickel. Each process waste must be analyzed at least once per year for the metals and results submitted to NYSDEC by June 30 of each year, with the first submittal to be by June 30, 1990.
5. Representative samples of Hyde Park NAPL (R8-40) and Taft NAPL (RB-41) must be analyzed and the results submitted to the Department before the first batches are incinerated for the 17 metals listed in Section 2.2.6 of Attachment A-1 of this permit and all organic hazardous constituents reasonably expected to be present in the wastes. These analysis must be repeated by June 30, 1991 and again by June 30, 1992 and the results to be submitted in writing to the Department by those dates.



6. The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection at least daily for leaks, spills, fugitive emissions and signs of tampering in accordance with 6NYCRR 373-2.15(g)(2) and Attachment B.
7. The Permittee shall install a continuous HCl emission monitor in the future after the NYSDEC approves such an instrument.
8. After any period of non-use of the incinerator exceeding one month, or after switching from one combustion unit (i.e. chamber) to the other, the Permittee must perform the following prior to feeding waste to the incinerator: thoroughly inspect the unit per Condition VI.F.5, calibrate all instruments listed in Condition VI.D.1 that have a calibration frequency less than quarterly, test the automatic waste feed cutoff system per Condition VI.D.1, and check all monitoring parameters listed in Condition VI.D.1 to ensure that all parameters are within the operating limits of the permit.
9. After any major maintenance or repair to the incinerator, and its associated equipment (including replacement of the stack fan and installation of new or cleaned packing in the packed tower or demister) the permittee must perform the work identified in Condition, VI.F.7 for the instruments, automatic waste feed cutoff, system parameters, and other monitoring parameters that could reasonably be impacted by the major maintenance or repair.
10. The permittee must comply with the Certificate to Operate for emission point U7601 and 6NYCRR Part 201.
11. The requirements of this Module supersede any conflicting requirements in Attachments A and F of this permit.
12. The Permittee shall close the incinerator and all associated equipment as required by 6NYCRR 373-2.15(h) and as described within the applicable portions of Attachment H Facility Closure Plan.

13. Before incinerating (other than in trial burns) the N-Area remedial waste or any other remedial waste containing greater than 10% fluorine, the Permittee shall:
- a. demonstrate to the Department 99.99% DRE on chlorobenzotrifluorides or approved surrogate for same or to provide alternative documentation that 99.99% DRE will be achieved
  - b. determine hydrogen fluoride (HF) removal efficiency and evaluate the impacts of HF emissions using available regulations and guidance
  - c. receive NYSDEC's written approval

At the latest, all stack tests or trial burns performed to satisfy a. and b. above shall be conducted during the trial burns required by Attachment J of this Permit or immediately following same.